

# Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan Governor

Lori F. Kaplan Commissioner

November 25, 2003

100 North Senate Avenue P.O. Box 6015 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.in.gov/idem

TO: Interested Parties / Applicant

RE: Smith Metal Finishing, Inc. / 003-18075-00328

FROM: Paul Dubenetzky

Chief, Permits Branch Office of Air Quality

# Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, within eighteen (18) calendar days from the mailing of this notice. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- the date the document is delivered to the Office of Environmental Adjudication (OEA): (1)
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- The date on which the document is deposited with a private carrier, as shown by receipt issued by (3)the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- the name and address of the person making the request; (1)
- (2) the interest of the person making the request:
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- the issues, with particularity, proposed for considerations at any hearing; and (5)
- identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

> Enclosures FNPER-AM.dot 9/16/03



Mr. Jeffrey D. Smith Smith Metal Finishing, Inc. 6214 Hoagland Road Hoagland, IN 46745

Dear Mr. Smith:

Re: Exempt Construction and Operation Status, **003-18075-00328** 

The application from Smith Metal Finishing, Inc., received on August 21, 2003, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following emission units, to be located at 6912 Derek Drive, New Haven, Indiana 46803, are classified as exempt from air pollution permit requirements:

- (a) One (1) metal polishing operation, with a maximum processing capacity of 120 pounds per hour, equipped with a centrifugal separator/dust collector for dust collection, with a control efficiency of 99.9%.
- (b) One (1) sulfuric acid aluminum anodizing operation, with a maximum processing capacity of 240 pounds per hour.
- (c) Cleaning and rinsing operations using water based cleaners.

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:
  - (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
  - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
- (2) Pursuant to 326 IAC 6-3-2 (Process Operations), for a process weight rate of 120 pounds per hour, PM emissions from the metal polishing operation shall be limited to 0.623 pounds per hour. The dust collector shall be operated according to manufacturer's specifications at all times the metal polishing unit is in operation, in order to comply with this limit.
- Any change or modification that may increase the potential to emit of a single Hazardous Air Pollutant (HAP) to 10 tons per year or greater, or that of Volatile Organic Compounds (VOCs) or a combination of HAPs to 25 tons per year or greater, shall require prior approval of the Office of Air Quality (OAQ).

Smith Metal finishing, Inc. New Haven, Indiana Page 2 of 2 Exemption No.: 003-18075-00328

This exemption is the first air approval issued to this source.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original signed by

Paul Dubenetzky, Chief Permits Branch Office of Air Quality

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cc: File - Allen County

Allen County Health Department Air Compliance – Jennifer Dorn

Permit Tracking

Technical Support and Modeling - Michele Boner

Compliance Data Section - Karen Nowak

# Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for an Exemption

#### Source Background and Description

Source Name: Smith Metal Finishing, Inc.

Source Location: 6912 Derek Drive, New Haven, Indiana 46803

County: Allen SIC Code: 3471

Exemption No.: 003-18075-00328
Permit Reviewer: Madhurima D. Moulik

The Office of Air Quality (OAQ) has reviewed an application from Smith Metal Finishing, Inc. relating to the construction and operation of a metal polishing and aluminum anodizing facility.

## **Emission Units and Pollution Control Equipment**

The source consists of the following emission units and pollution control devices:

- (a) One (1) metal polishing operation, with a maximum processing capacity of 120 pounds per hour, equipped with a centrifugal separator/dust collector for dust collection, with a control efficiency of 99.9%.
- (b) One (1) sulfuric acid aluminum anodizing operation, with a maximum processing capacity of 240 pounds per hour.
- (c) Cleaning and rinsing operations using water based cleaners.

#### **Enforcement Issue**

There are no enforcement actions pending.

#### **Stack Summary**

There are no external stacks at this source.

#### Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on August 21, 2003, with additional information received on October 22, 2003.

#### **Emission Calculations**

### PM emissions from metal polishing operation:

Normal usage rate of buffing compounds = 1 lb/hr = 4.38 tons per year.

Dust collected = 2 tons per year (99.9%) efficiency.

The remainder of the buffing compounds are greater than 100 microns in size and fall to the floor. Pursuant to 326 IAC 1-2-52, PM = particles that are less than 100 microns. Therefore, only emissions of particulates <100 microns will be considered as PM.

Permit Reviewer: Madhurima D. Moulik

Maximum usage rate of buffing compounds = 2 lb/hr = 8.76 tons per year. Therefore, potential **PM/PM-10** emissions = **4 tons/yr**.

#### Anodizing Operation:

This operation uses sulfuric acid which is not a HAP. Therefore, no regulated compounds are emitted from this operation.

#### Cleaning and Rinsing:

The source uses water for cleaning and rinsing of metal parts. Therefore, there are no VOC or HAP emissions from this source.

#### Potential to Emit of the Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential to Emit (tons/yr)
PM	4.0
PM-10	4.0
SO <sub>2</sub>	-
VOC	-
CO	-
NO <sub>x</sub>	

HAPs	Potential to Emit (tons/yr)
Single HAP	-
Total	-

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than the levels listed in 326 IAC 2-1.1-3(d)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3. An exemption will be issued.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3. An exemption will be issued.

# **County Attainment Status**

The source is located in Allen County.

Pollutant	Status
PM-10	attainment
$SO_2$	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

Smith Metal Finishing, Inc.

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New Haven, Indiana

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(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Allen County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

(b) Allen County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

#### Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons per year.

This is the first air approval issued to this source.

# Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) applicable to this source.

#### State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Allen County and the potential to emit of of all regulated pollutants is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of this metal polishing and aluminum anodizing operation will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in the permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

Smith Metal Finishing, Inc. New Haven, Indiana

Permit Reviewer: Madhurima D. Moulik

#### State Rule Applicability – Individual Facilities

326 IAC 6-3-2 (Process Operations)

The unrestricted potential to emit of the polishing operation, including particulate matter greater than 100 microns, is 2 pounds per hour. Therefore, this source is subject to 326 IAC 6-3.

The particulate matter (PM) from the metal polishing operation shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where  $E =$  rate of emission in pounds per hour and  $P =$  process weight rate in tons per hour

For a process weight rate of 120 pounds per hour, PM emissions shall be limited to 0.623 pounds per hour = 2.73 tons per year.

The dust collector shall be operated according to manufacturer's specifications at all times the metal polishing unit is in operation, in order to comply with this limit.

326 IAC 8-3-2 and 326 IAC 8-3-5 (VOC Rules: Organic Degreasing Operations)

The cleaning operations at this facility do not use organic solvents. Therefore, 326 IAC 8-3-2 and 326 IAC 8-3-5 do not apply.

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements)

There are no VOC emissions from any of the emission units at this source. Therefore, 326 IAC 8-1-6 does not apply.

No other Article 8 rules apply.

#### Conclusion

The construction and operation of this metal polishing and aluminum anodizing facility shall be subject to the conditions of the Exemption No.: 003-18075-00328.